APPENDIX A

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[FRL 1352-7]

Proposed Revision of the West Virginia State Implementation Plan

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: On November 9, 1978, the Administrator approved as a revision of the West Virginia State Implementation Plan (SIP), amendments to the Commonwealth's Regulation X dealing with sulfur dioxide (SO_2) emissions from electric power generating plants. In response to petitions for review to the Third Circuit Court of Appeals, EPA has reconsidered the air quality impact of the revised emission limits for two power stations affected by the amendments. On the basis of its reconsideration, EPA now proposes to approve the revision.

DATE: Comments must be submitted on or before December 7, 1979.

ADDRESSES: Copies of the documentation in support of the proposed rule are available for public inspection during normal business hours at the following offices:

U.S. Environmental Protection Agency, Region III, Air Programs Branch, Curtis Building, Sixth and Walnut Streets, Philadelphia, PA 19106. Attn: Mr. William Belanger.

Public Information Reference Unit, Room 2922, EPA Library, U.S. Environmental Protection Agency, 401 M Street SW., Washington, D.C. 20460.

All comments on the proposed revision submitted by December 7, 1979, will be considered and should be directed to:

Mr. Howard R. Heim, Chief, Air Programs Branch (3AH10), Air, Toxics & Hazardous Materials Division, U.S. Environmental Protection Agency, Region III, Sixth and Walnut Streets, Philadelphia, PA 19106. Attn: AH 007WV.

FOR FURTHER INFORMATION CONTACT: Mr. William Belanger (3AH13), Air Programs Branch, U.S. Environmental Protection Agency, Region III, Curtis Building, 10th Floor, 6th and Walnut Streets, Philadelphia, PA 19106; phone (215) 597-8188.

SUPPLEMENTARY INFORMATION: On November 9, 1978, (43 FR 52239) the Administrator approved as a revision to the West Virginia SIP, amendments to the Commonwealth Regulation X, which deals with sulfur dioxide emissions from electric power plants. Among other actions, the revisions would allow increases in emissions from the Harrison and Mitchell generating stations. The approval was based on the determination by EPA that the relaxation of emission limitations would not interfere with attainment or maintenance of the National Ambient Air Quality Standard for sulfur dioxide. This determination was based on air pollution modeling conducted by EPA. This modeling incorporated an analysis of the Harrison plant based on a "Good Engineering Practice" stack height as mandated by Sec-

tion 123 of the Clean Air Act, but the approval of the limitation for the Harrison plant was for a period of one year, or until EPA promulgated final regulations implementing Section 123, whichever came first.

On January 3, 1979 and January 5, 1979, the Commonwealth of Pennsylvania and the Council of Senior West Virginians, *et al.*, filed in the U.S. Court of Appeals for the Third Circuit petitions for review of EPA's final rulemaking action of November 9, 1978. On July 9, 1979, EPA requested the Court remand to the agency two issues raised by the petitioners. EPA sought to reconsider the air quality impact of the revised emission limitation for the Harrison and Mitchell stations in light of all meteorological data available, and to consider the impact of Harrison on the Prevention of Significant Deterioration (PSD) increments. The Court granted EPA's motion on July 10, 1979 and stayed further action pending EPA's reassessment of its earlier action. EPA agreed to propose a rule governing these power stations by October 8, 1979. Due to difficulties in completing its analysis, EPA requested and received from the court an extension to November 7, 1979. In addition, West Virginia asked EPA to propose a permanent emission limit for the Harrison station as final regulations under Section 123 have not been issued.

EPA has conducted new modeling for the Harrison and Mitchell plants. The modeling was conducted utilizing the CRSTER Model for areas within 50 kilometers of the plants and two independent approaches for the Class 1 PSD areas which are more distant. A formal statistical analysis was performed to account for fuel variability as a means of realistically evaluating the impact of the plant in light of the uniquely extensive record of meteorological con-

ditions during nine years. The results of the modeling shows no expected violations of any of the SO_2 air quality standards during the useful life of the plants. The modeling also shows that the Harrison plant will consume less than the available PSD increment. Modeling was also performed for receptors within the Commonwealth of Pennsylvania and it was found that emissions from the plants will not prevent attainment of the SO_2 standards in Pennsylvania. All modeling for the Harrison station assumed good engineering practice stack height, and EPA proposes to make the proposed Regulation X amendments permanent.

This notice is to announce the results of the new modeling, and to provide a 30-day comment period before it is decided whether to approve the earlier revisions to Regulation X (previously approved November 9, 1978) concerning the Mitchell and Harrison power stations as a revision to the West Virginia State Implementation Plan. Therefore, the public is invited to submit to the address stated above, comments on whether to approve this proposed rule as a revision of the West Virginia State Implementation Plan.

The Administrator's decision to approve or disapprove the proposed revision will be based on whether the amendments meet the requirements of section 110(a)(2) of the Clean Air Act and 40 CFR Part 51, Requirements for Preparation, Adoption, and Submittal of Implementation Plans.

Under Executive Order 12044, EPA is required to judge whether a regulation is "significant" and therefore subject to the procedural requirements of the order or whether it may follow other specialized development procedures. EPA labels these and other regulations as "specialized". I have reviewed this

regulation and determined that it is a specialized regulation not subject to the procedural requirements of Executive Order 12044.

(42 U.S.C. 7401-7642)

Dated: October 29, 1979.

Alvin R. Morris,

Acting Regional Administrator.

[FR Doc. 79-34447 Filed 11-6-79; 8:45 am]

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APPENDIX B

Interstate SO_2 Impacts

Another topic which you asked me to address is the issue of interstate SO_2, impacts, especially the impact of the two power plants, emissions on Pennsylvania. Our original concept in addressing interstate impacts and this analysis was to simply ignore state borderlines. The receptor field around the Mitchell power plant extends into Ohio and West Virginia and was chosen without regard to the political borderline. The Mitchell power plant was not modeled in Pennsylvania simply because earlier preliminary modeling which set up the receptor network to be used around Mitchell indicated that the concentration would peak well before the plume reaches Pennsylvania. The CRSTER receptor rings were set up deliberately in the area of peak concentration. The receptor ring farthest from the plant was at a distance of 11 kilometers, while the distance to the nearest border of the Commonwealth of Pennsylvania is 26 kilometers. We did not at the time feel it necessary to model within the Commonwealth of Pennsylvania because we observed the concentrations that we calculated dropping off as we approach 11 kilometers. Unless there is a terrain obstacle sticking up into a plume, there is no way that a higher concentration can be observed at a farther distance. There is no such terrain obstacle in Western Pennsylvania. In the case of the Harrison plant, the distance to the nearest Pennsylvania border is 37½ kilometers, and the same reasoning applied.

In response to your request, however, we have done an express analysis of the impact of these regulatory changes on the air quality of Pennsylvania. I will

again stress that the distances involved are large. The 26 kilometers distance from the Mitchell plant is not excessive but the 37 kilometers distance from the Harrison plant to Pennsylvania is greater than we would normally prefer to model using conventional Gaussian techniques. We consider conventional Gaussian models to be reliable at approximately 30 kilometers and limit our normal analysis to a distance of 50 kilometers because beyond that distance the models are considered quite unreliable. This would allow us to model areas immediately within the borders of Pennsylvania but would not allow us to address the impact of these two power plants on areas such as Pittsburgh where the most serious of the SO_2 problems are. However, air pollution does not become more concentrated at greater distances from a source, it becomes less concentrated, so a look at the concentrations as the plume enters Pennsylvania will give an upper bound on the maximum concentrations which would occur in the State. In the process of rerunning the CRSTER model for Mitchell and Harrison we added receptors within the border of Pennsylvania. This was done by replacing the outer receptor rings around both plants with partial rings which would give a field of receptors immediately across the Pennsylvania border. In the case of Mitchell a receptor ring was chosen at thirty kilometers and in the case of Harrison this receptor ring was chosen at a distance of forty kilometers from the plants. This resulted in six receptors beyond the Pennsylvania border around the Mitchell plant and five receptors beyond the Pennsylvania border around the Harrison plant. For convenience I will summarize the results of this analysis by reporting only the highest concentrations recorded

in the State of Pennsylvania from each of the plants. This will be the highest observed annual concentration of any of the receptor points, the second highest 24 hour concentration at any of the receptor points, and the second highest three hour concentration at any of the receptor points. This form of reporting will necessarily distort the picture of the impact of Pennsylvania because it will present only the maximum concentrations. One must recognize that the average concentrations or normal concentrations will be considerably lower than these reported values. Also, as one moves farther into Pennsylvania, the concentrations will be expected to drop off and hence the concentrations that I am reporting here are the highest that would be expected from the plants as they impact on Pennsylvania. I will first report the annual average concentration at the highest receptor in Pennsylvania from the Mitchell plant. This will be reported for the years 1964, 1970, 1971, 1972, 1973, 1974, 1975, 1976 and 1977 in that order. These concentrations in micrograms per cubic meter are 2.35, 2.71, 2.67, 2.47, 2.27, 2.20, 1.88, 2.46 and 2.74. The second highest of 24 hour concentrations in the same order are 22.1 microgram per cubic meter, 28.5, 28.5, 33.4, 22.8, 25.1, 25.1, 34.0, 30.9. Similarly, the 3 hour concentrations from the Mitchell plant at the highest receptor in the same order are 86.2 micrograms per cubic meter 78.6, 96.2, 68.4, 80.6, 91.1, 79.6, 72.0, 88.8. It can be readily observed here that the concentrations from the Mitchell plant are a small fraction of the air quality standards. These concentrations resulted from modeling Mitchell with its 1974 annual average fuel content of 3.62 percent. They maybe scaled upward by simply multiplying by 4.9 over 3.62 to obtain the total contribu-

tion of the plant if it were burning its maximum fuel under the new regulations. This results in annual average concentration of 3.71 micrograms per cubic meter from the plant for the meteorological year 1977 which is the highest of those which I previously quoted, a 24 hour contribution of 46 micrograms per cubic meter for the meteorological year 1976 which is again the highest of those previously quoted, and a 3 hour concentration of 130 micrograms per cubic meter for the meteorological year 1971.

Similarly, I have reviewed the calculated concentrations in Pennsylvania resulting from emissions of the Harrison power plant. I will report these concentrations in the same format that I reported them for Mitchell. The annual concentrations from Harrison for the years 1964, 1970, 1971, 1972, 1973, 1974, 1975, 1976 and 1977 are: 4.52 micrograms per cubic meter, 3.97, 3.70, 3.74, 4.43, 4.15, 3.94, 4.47 and 4.80; the second high 24 hour concentrations are 76.6, 58.8, 51.4, 65.8, 69.7, 53.1, 55.2, 67.1, 54.9. The 3 hour concentrations are: 568 micrograms per cubic meter, 347, 304, 373, 307, 311, 344, 344, 329. These results were modeled assuming a sulfur content in fuel of 3.3 percent which was from 1974 annual average. The regulation is 3.2 percent so the actual impact on Pennsylvania if the plant were to burn its regulated sulfur content for the entire year would be somewhat less than these numbers, but the numbers do give a good idea of the maximum impact of the plant on Pennsylvania. Again, there are no predicted violations of any of the air quality standards. Also, it should be realized that the area where these concentrations occur from Harrison is near the southern border of Pennsylvania and is a region with little

local SO_2 contribution. The impact on any nonattainment area within Pennsylvania would be considerably less than this. It should be noted that the choice of load conditions was based on a maximum in the area near the plants, not at a large distance. The conservative nature of the calculation will be somewhat offset by this, so the concentrations may be considered a realistic maximum value.

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